



FISHERIES TRADE

EU industry in conflict over autonomous tariff quota for tuna loins

The EU is currently debating autonomous tariff quotas (ATQs) for seafood for 2024-25, including tuna loins. Some EU members are pushing for an increase from the current 35,000 tonnes duty-free quota on tuna loins to 60,000 tonnes.² A higher quota will act as preference erosion for loin processors in PNG and the Solomon Islands because third-country suppliers without a trade deal with the EU will access the market duty-free.

The EU provides an autonomous tariff quota (ATQ) for products where production in the EU is insufficient to meet the needs of the user industry based in the EU, including for certain fishery products. ATQs are requested by members states and their terms are a negotiated outcome of a range of economic interests.

The ATQ directly shapes the economic behaviour of EU importers who annually store frozen loins in refrigerated EU-based customs warehouses months before the ATQ is released on 1 January, and then scramble to declare them to customs. The major beneficiary of this scramble in recent years has been loins exported from China, which are reportedly already competitive on EU markets with 24% import duty.³

The EU industry has long been divided between firms that specialise in catching canning grade tuna and those that predominantly process it.⁴ The economic interest of tuna fishing firms as represented by Europêche (the European of association fishing vessel operators) is to limit the volume of duty free loins entering the EU because its members want to sell whole round frozen directly to EU canneries (especially large yellowfin) and/or to sell to loin processing facilities in countries with duty free access to the EU who are tied in to procure EU-caught or local fish under EU rules of origin.⁵ Europêche further argues that the social and environmental standards imposed on its members are greater and more costly than those on certain overseas competitors; costs which the tariffs help in-part to mitigate.

In contrast, the European Fish Processors and Traders Association (AIPCE) would prefer to minimise the cost of raw material inputs through a larger source of supply of duty-free loins. They argue that this will allow them to maintain competitiveness in EU markets vis-à-vis imported canned tuna processed overseas, and thus maintain profitability and employment in often economically disadvantaged and politically sensitive coastal areas in Spain, Italy, Portugal and France. They also argue that resulting lower consumer prices will encourage Europeans to eat more seafood.⁶

FISHERIES REGULATION

Effort to update US law to reflect South Pacific Tuna Treaty agreements underway

While Pacific Island Parties (PIPs) to the South Pacific Tuna Treaty and the US continue to negotiate the terms of a new Treaty, US Congress also worked to implement into law a series of amendments that were agreed between the US and Pacific Island Parties (PIPs) to the Treaty in 2016, but are still not reflected in current US law. At present, the amendments are in effect via a Memorandum of Understanding between the US and the PIPs. US Representative Aumua Amata Coleman Radewagen of American Samoa and US Representative Ed Case of Hawaii have introduced *The South Pacific Tuna Treaty Act of 2023* to the US Congress, which would enact the 2016 amendments into US law.⁷

CONTENTS

Fisheries Trade

EU industry in conflict over autonomous tariff quota for tuna loins

Fisheries Regulation

Effort to update US law to reflect South Pacific Tuna Treaty agreements underway

US Agency identifies countries engaged in IUU fishing; includes forced labour in IUU definition

Concern grows over impact of seabed mining on tuna stocks

Fisheries Management

FFA to receive assistance in combatting IUU through the use of satellites

IATTC first to adopt binding timeframes on biodegradable drifting FADs

Fins naturally attached policies gain traction; EC to assess citizens' proposed EU shark fin trade ban

Tuna Industry

Thai Union's SeaChange 2030 strategy reforms supply chains and may shape the tuna industry

FAD recovery programs to mitigate risk of coastal habitat damage

Tuna Price Trends

A higher quota on tuna loins will erode the hard-won trade preferences of PNG and Solomon Islands



American Tunaboat Association (ATA) director Bill Gibbons-Fly indicates that the amendments improve operational conditions and flexibility of the US fleet.⁸ Two are particularly significant. First, the original Treaty governed US tuna fishing in both PIP EEZs and the high seas. However, the 2016 amendments remove 'high seas' from the Treaty. However, US law was never updated to reflect this change, so all US tuna vessels still need a Treaty license to fish on the high seas. This requirement has weakened US vessels' position in the Pacific, especially vis-a-vis other fleets that are able to fish on the high seas without licensing requirements. A second amendment allows American fishing companies to negotiate directly with Pacific Island states for additional and/or bilateral (rather than the multilateral access of the original Treaty) access, instead of having to pay for access across the region and having to negotiate through the US Government. The ATA notes that these provisions are essential for the viability of the fleet, which has shrunk from 24 vessels to just 13 in the last several years. The Biden Administration is also supporting ongoing work on the South Pacific Tuna Treaty as part of the Pacific Partnership Strategy and has pledged USD 600 million over ten years to support fisheries economic development, collaboration on climate resilience, blue economy, and maritime security, as well as the US tuna fleet.

US Agency identifies countries engaged in IUU fishing; includes forced labour in IUU definition

The *2023 Report to Congress on Improving International Fisheries Management*, recently published by the US National Oceanic and Atmospheric Administration, identifies seven countries engaged in illegal, unreported and unregulated (IUU) fishing.⁹ As reported in previous issues of *FFA Trade and Industry News*,¹⁰ this report was mandated by the *High Seas Driftnet Fishing Moratorium Protection Act*, which, in part, requires the Secretary of Commerce to identify and certify nations whose fishing vessels are engaged in: IUU fishing; bycatch of protected living marine resources; or, shark catch on the high seas without a regulatory program comparable to that of the US. The report is notable, not least because it is the first time the US has collapsed issues of forced labour into the definition of IUU fishing in its evaluations of other countries' fishing activities.

The countries identified in the 2020-2022 period include Angola, Grenada, Mexico, China, Taiwan, The Gambia and Vanuatu. Of these, China and Taiwan's IUU determinations specifically included reference to the use of forced labour related to the production of seafood products. China and Vanuatu are also identified for targeting or incidentally catching sharks without regulations that are comparable to the US.

The report also includes certification determinations for the 31 nations and entities identified in the 2021 report, verifying if they took actions to remedy identifying IUU and bycatch problems. The verification process reveals that some countries identified in the 2021 report have made progress in addressing specified IUU concerns: 14 of the 29 nations alleged to have protected living marine resource bycatch were found to have taken actions to fix the situation. Fourteen nations received negative certifications for not having a regulatory program comparable to that of the United States to reduce bycatch of sea turtles in pelagic longline fisheries.

A closer look at the certifications and new listings illustrates how this review process works. For instance, Taiwan was awarded a positive certification for addressing issues from the 2021 report. Specifically, the US National Marine Fisheries Service (NMFS) had identified Taiwan for having vessels that violated specific RFMO CMMs and failing to take corrective actions. Taiwan subsequently provided NMFS with

**Making
South Pacific
Tuna Treaty
Amendments
law in the US
would improve
US fleet
competitiveness**

**The US
identifies China
and Taiwan
as engaging
in IUU fishing
because of
findings of
forced labour**

detailed case reports for 11 vessels with allegations against them: seven vessels have cases that are still open, two cases were dismissed without penalty, and two vessels were penalized. Based on this process, NMFS considers that Taiwan is doing its due diligence to investigate alleged violations, provide evidence and issue penalties when appropriate. Based on this analysis, NMFS positively certified Taiwan. However, Taiwan appeared on the new analysis for failure to adhere to a specific WCPFC CMM, based on interviews conducted by NGOs, as well as for utilizing forced labour, based on The Department of Labor's *List of Goods*, as well as numerous public reports of forced labour in Taiwan distant water fleet. The US will review if Taiwan has addressed these alleged violations in the coming years. In general, negative certification can come with high consequences: it may result in denial of entry into US ports or waters and potential prohibition of imports of certain fish or fish products.

The US indicated that IUU fishing undermines US and global efforts to sustainably manage fisheries and emphasized its goal with this work is to collaborate with countries to combat IUU practices and strengthen fisheries management and enforcement practices. Environmental NGO Oceana applauded the effort.¹¹ More broadly, like the EU IUU regulation, this work enables the US to exert regulatory pressure on states outside of its jurisdiction via the threat of loss of access to its large market.

Concern grows over impact of seabed mining on tuna stocks

In July, the International Seabed Authority (ISA) met to consider regulations that could enable mineral exploitation in 'the Area', the parts of the seafloor that are outside of state space and are defined in international law as the Common Heritage of Humankind. The meeting was held in the context of growing concern over the environmental impacts of seabed mining and attention to potential intersections between tuna fisheries and seabed mining. In 2021, a letter signed by roughly 500 scientists called for a deep-sea mining moratorium, citing, in part, concern that mining could affect tuna species and fisheries.¹² In recent months, some US lawmakers joined in calls for temporary bans on deep seabed mining until a full assessment of environmental impact is completed and a new regulatory regime is established to protect ocean resources.¹³ Likewise, several sustainable seafood advocacy groups issued a joint statement calling for a moratorium on seabed mining. These groups included the Global Tuna Alliance – which represents a third of the world's tuna trade and important supermarket suppliers – Monterey Bay Aquarium's Seafood Watch, and the Sustainable Seafood Coalition – which is comprised of 45 British seafood firms.¹⁴

Some of this attention followed from a study published in *Nature Ocean Sustainability* that argued that, in the context of climate change, seabed mining is likely to pose a threat to bigeye, skipjack and yellowfin populations in the Eastern Pacific.¹⁵ Focusing on the Clarion-Cliperton Zone (CCZ), an area with high densities of polymetallic nodules on the seafloor, as well as commercial fish stocks that fall under the jurisdiction of IATTC and WCPFC, the authors argue that conflict between fisheries and deep sea mining is likely to occur if mineral exploitation advances. The study outlines four mechanisms by which nodule mining in the CCA could negatively impact fish populations, ecosystem dynamics and commercial fishery dynamics – noting that the extent of impacts are unknown and debated. The four areas are: discharge plumes and related increase in particle concentration in the water column; elevation of concentration of metals from discharge; noise pollution; and, conflict between mining vessel and fishing vessels. Furthermore, the study explores how future climate redistribution of commercially important tuna species might increase

Negative certification by the US could result in loss of access to US ports or market access

New study points to potential conflicts between tuna fisheries and deep sea mining



potential for conflict and resulting environmental and economic repercussions if seabed mining advances. Notably, authors highlight potential inequalities: negative impacts to tuna stocks or increased consumer concern about toxic accumulation in seafood could disproportionately impact tuna-dependent economies, including small island states, while the gains of seabed mining are likely to be led by more economically developed states. The study authors also highlight that the ISA's Regional Environmental Management Plan does not include assessment of fish stocks or fishing activity and does not consider potential impacts on fisheries or require consultations between ISA and RFMOs. Though the Common Heritage principle will require attention to the distribution of mining revenues, it is not clear if the principle and its application by ISA could be attentive to the distribution of negative externalities from seabed mining.

The international meeting at ISA headquarters ended in late July without a green light to start industrial scale mining. During the meeting, Chile, France, and Costa Rica, backed by other countries proposed discussing a precautionary pause on mining in the Area to ensure the protection of the marine environment. China had blocked the motion for discussion throughout the week, but finally agreed to allow it on the 2024 agenda. The ISA had been under pressure to finalize rules governing mining during this session, however the 36-member council, which oversees rules and regulations, decided it will not issue any extraction permits until it finalizes mining regulations. It said it would now work with a view toward adopting regulations in 2025, but did not decide how to consider any application requests that will arrive before then. Though more than 20 countries have called for a pause or ban, there is also support for proceeding, including from Nauru, whose president, Russ Kun, expressed that seabed mining is an opportunity for Nauru to help accelerate the energy transition and combat climate change.¹⁶

FISHERIES MANAGEMENT

FFA to receive assistance in combatting IUU through the use of satellites

The Pacific Islands Forum Fisheries Agency (FFA) is set to receive additional assistance in its continued fight against IUU fishing in the Western and Central Pacific. Australia has contracted with a US-based satellite and analytics company to provide support to FFA through a pilot program that utilizes 21 low-earth-orbit satellites that are said to be able to detect, geolocate and characterize a variety of radio frequency (RF) signals used for navigation and communication. The purpose of the monitoring is to fill gaps in information obtained from other sources to better characterize vessel activity.¹⁷

The provider is the Herndon, Virginia-based company, HawkEye 360. The company has extensive ties to the US national security community and has had contracts with the U.S. National Reconnaissance Office since 2019. HawkEye 360 is the first commercial company to use satellites to create RF data analytics.¹⁸ The company owns its infrastructure, including data processing, algorithms and the 21 satellites utilized in the program.

The system can detect a wide variety of RF signals generated by vessels from their electronic equipment such as radar, high frequency radios or other communication devices; it uses machine learning to develop algorithms that can assist in identifying and tracking sources of interest. According to the company, they will provide RF data, analytics and training that will assist in identifying potentially illicit activity.

The ISA's Regional Environmental Management plan does not assess interactions with fish stocks or fisheries, nor require consultation with RFMOs

A US company will provide analyses of satellite data to fill gaps in surveillance information

Of primary concern are instances when vessels equipped with an automatic identification system (AIS) turn off their AIS which transmits a ship's position so that other ships are aware of its position. There are also numerous smaller fishing and support vessels that may not be equipped with AIS.

Specific information on which bands in the RF spectrum might be monitored has not been publicly released. RF can include those frequencies used for a wide variety of electronic transmitting equipment. For example, satellite buoys commonly used with FADs tend to operate in the L-band (1-2 GHz). The 3-30 MHz portion of the spectrum is mostly used by short wave high frequency radios for communication. The 30 MHz to 300 GHz portion can include licensed and unlicensed VHF and UHF radios such as those used between vessels and between vessels and aircraft. Also falling within that part of the spectrum are ship radars, including those in the X band (8-12 GHz) used to detect birds that can be associated with schools of tuna, as well as cell phones, GPS transmitters; and satellite communications equipment employed for VMS reporting and other purposes.

The activities to be performed under the contract are part of Australia's commitment to the "Quad nations" (Australia, India, Japan, USA) Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA), an initiative launched in May 2022 to provide shared technology, training and insight into activity in the Pacific Islands, Southeast Asia, and the Indian Ocean.¹⁹

It is believed that the Australia-supported Pacific Fusion Centre based in Vanuatu will play a role in delivering some of the support services such as training and strategic analyses under the program to FFA and its member countries. The Centre is a new Pacific regional body, the charter of which was endorsed by the Pacific Island Forum Officials Committee on 23 July 2021. It is headed by James Movick, who was appointed as Director in December 2021 and previously served as FFA Director General 2012-2018.²⁰

IATTC first to adopt binding timeframes on biodegradable drifting FADs

The 101st Annual Meeting of the Inter-American Tropical Tuna Commission (IATTC) was held in Victoria, Canada from 31 July – 11 August 2023. An impressive 12 resolutions were approved during the course of the meeting relating to FADs, harvest strategies and harvest control rules, sharks, VMS, dolphin fish and climate change. The tropical tuna measure was not on the agenda for this meeting, with the current measure remaining in effect until next year, when it will be revisited.

IATTC is the first RFMO to adopt a binding timeline for the implementation of fully biodegradable FADs in its new resolution on the design and biodegradability of drifting FADs (Resolution C-23-04). The resolution establishes five categories of drifting FADs based on their degree of biodegradability ranging from non-biodegradable (Category V) to 100% biodegradable (Category I). These categories take into account the need for stepwise implementation of biodegradable FAD designs, as research continues to identify proven designs and materials. From 1 January 2026, drifting FADs need to be partially biodegradable, with either the surface (raft) or subsurface (tail) parts of the FADs constructed from fully biodegradable materials (Categories III & IV). From 1 January 2029, FADs need to be constructed from fully biodegradable materials, with the exception of plastic-based flotation components (Category II). In 2030, the Commission will consider the feasibility of shifting to a 100% biodegradable requirement (Category I) by 2031, based on the availability (or not) of biodegradable floatation components. The use

*From 2029,
IATTC will
require drifting
FADs to be fully
biodegradable
with the
exception of
plastic flotation
components*

of nylon ropes is also permitted for strengthening the structure of the FAD, until proven biodegradable alternatives are available. In addition, from 1 January 2025, all drifting FADs deployed must be fully non-entangling, with the use of mesh net prohibited in any component of the FADs. Observers deployed on large-scale (Class 6) purse seiners will monitor vessels' compliance with these FAD design requirements at the time of deployment of each drifting FAD; flag states must also ensure this information is collected for smaller purse seiners (Classes 1-5) which are not currently required to carry human observers.²¹ To prevent drifting FAD loss or stranding, IATTC members and cooperating members are also encouraged to initiate cooperative voluntary FAD recovery programs, whereby FADs are collected and are taken to port for recycling or disposal (C-23-03).²²

Other notable developments include IATTC following suit from other RFMOs (WCPFC, ICCAT, IOTC, SPRFMO and NPFC), by adding **climate change** as a standing agenda item of the Commission (and subsidiary bodies) from 2024 (Resolution C-23-10).²³ Going forward, climate change impacts on fisheries in the ICCAT Convention Area will be taken into account in management measures; environmental and climate impacts of the activities of the Commission will also be considered. On **sharks**, a new resolution was adopted (C-23-07) which consolidates and strengthens three previous shark resolutions.²⁴ The new measure requires that sharks are landed with fins naturally attached to the body; until the end of 2026 alternative measures may be taken which still permit the removal of fins, provided the fins and corresponding carcass are stored together in a bag, bound together by rope or wire or are tagged. On **harvest strategies**, IATTC adopted a harvest strategy, including a harvest control rule for North Pacific albacore;²⁵ interim reference points were also adopted for skipjack.²⁶

Fins naturally attached policies gain traction; EC to assess citizens' proposed EU shark fin trade ban

In recent years, fisheries management requirements concerning shark-finning - the retention of shark fins and discarding of the trunk at sea - have strengthened in an effort to minimize this cruel practice and reduce fishing pressure on sharks. Gradually, tuna regional fisheries management organisations (trFMOs) are requiring vessels to land sharks with fins naturally attached (FNA) to the carcass. The Indian Ocean Tuna Commission (IOTC) led this charge, adopting a FNA requirement in 2017 for all fresh sharks landed. In 2020, the Western and Central Pacific Fisheries Commission (WCPFC) followed suit for all sharks, whether fresh or frozen. Most recently, in August 2023, the Inter-American Tropical Tuna Commission (IATTC) adopted a FNA measure, albeit with exceptions that dilute its immediate impact. The International Commission for the Conservation of Atlantic Tunas (ICCAT) is the last remaining RFMO to move from a 5% fin:carcass landed weight ratio to a FNA requirement; IOTC also still permits a 5% fin:carcass ratio for frozen sharks.²⁷ The main impetus for shifting from the 5% fin:carcass ratio to fins naturally attached has been due to difficulties encountered in monitoring compliance with this requirement, whereas FNA is unequivocal.

Industry, third party certifiers and NGOs are also taking a zero-tolerance stance on shark-finning. From 1 January 2023, the International Seafood Sustainability Foundation (ISSF) introduced a requirement prohibiting ISSF members from conducting business with any company that does not require retained sharks to be landed with fins naturally attached; ISSF members are also banned from transacting with any vessel found to be shark-finning by an RFMO or national authority for two years.²⁸ In addition, the Marine Stewardship Council's new Fisheries Standard which came into effect on 1 May 2023, requires all certified fisheries that retain sharks to

WCPFC, IATTC
and IOTC
have adopted
fins naturally
attached
policies for
landed sharks



have a FNA policy in place. Further, MSC has adopted a new evidence requirements framework which will assess if these FNA policies are being properly enforced. Any entity and associated vessels convicted of shark finning are not eligible for MSC certification for at least two years.²⁹

In Europe, as the result of a 'Stop Finning – Stop the Trade' European citizens' initiative (ECI) ³⁰, the European Commission (EC) is currently assessing the need for a legislative measure which goes beyond requiring sharks to be landed with fins naturally attached, to a complete ban on the trade of loose shark fins.³¹ While the EU pioneered the prohibition of shark finning and the adoption of a fins naturally attached landing requirement, the EU is a significant exporter of frozen shark fins to Asian markets. On average, the EU exports around 2,300 tonnes annually of shark fins (valued at €170 million); in 2021, the global trade in shark fins was estimated to be around 7,100 tonnes.³² The 'Stop Finning – Stop the Trade' ECI has garnered support from over 100 NGOs and almost 1.2 million EU citizen signatories, calling for additional EU trade legislation completely banning the export, import and transit of loose shark fins, on the grounds *inter alia* that a legal market for shark fins creates a loophole for illegal fins, as origin and species are difficult to trace.³³ On 5 July 2023, the EC responded to the ECI request, indicating the Commission will launch an impact assessment on the environmental, social and economic consequences of an EU shark fin ban by the end of 2023. This impact assessment will inform the Commission's decision to propose legislative changes, support alternative measures to achieve the goals of the ECI, or reject the proposal with justification provided for doing so.³⁴ Should the EC introduce legislation banning the trade of loose shark fins, this could pave the way for the adoption of similar trade bans by other countries and entities (e.g. ISSF, MSC etc.), which would further reduce fishing pressure on sharks. Conversely, this may have negative impacts on the commercial viability of legitimate shark fisheries.

TUNA INDUSTRY

Thai Union's SeaChange 2030 strategy reforms supply chains and may shape the tuna industry³⁵

Thai Union, owner of leading tuna brands Chicken of the Sea, John West UK and Petit Navire, has announced the second round of its SeaChange 2030 sustainability strategy. Building on the first phase of SeaChange launched in 2016, it significantly expands Thai Union's (TU's) sustainability strategy, backed by an investment of USD 200 million. Working across the company's presence in the sourcing, production and consumption nodes of the value chain, the initiative sets out 11 inter-connected goals, intended to 'help reduce carbon, minimize waste, safeguard and rebuild ecosystems, ensure safe, decent, and equitable work is a reality across the value chain, and advance a healthier world.'³⁶ SeaChange 2030 consolidated and expands on several of TU's existing sustainability initiatives and partnerships.

In response to the scandals of IUU fishing and modern slavery that surfaced in the early years of the 2010s, Thai Union's 2016 SeaChange strategy had focussed on the responsible sourcing of tuna. By adopting a Tuna Commitment policy, the company had aimed to 'achieve a minimum of 75 percent of our own brands of tuna coming from fisheries that are either Marine Stewardship Council (MSC)-certified or in a Fishery Improvement Program (FIP) by the end of 2020'.³⁷ The initiative also committed to ethical recruitment practices, to be achieved via codes of conduct related to labour practices and vessels of its suppliers. By 2019, the company stated that it had reached the goal of responsibly sourcing at least 75% of its branded tuna.

Driven by a European Citizens' Initiative, the European Commission is assessing a proposal to ban the trade of loose shark fins

SeaChange 2030 consolidates and expands Thai Union's environmental and social sustainability efforts

In 2021, TU launched a partnership with The Nature Conservancy to improve at-sea monitoring of supplier vessels, declaring in the same year that 71% of the company's tuna was caught where a combination of human and/or electronic observer coverage was present.³⁸ The 2030 strategy increases the company's commitment to sourcing from responsible sources to 100%, now including responsible labour practices.

Following this, TU collaborated in 2022 with the Sustainable Fisheries Partnership (SFP) to undertake an audit of bycatch from TU supplier vessels.³⁹ This partnership came after the publication of an SFP report detailing the impacts of tuna longlining in the WCPO on the declines of many shark, sea turtle, and seabird species.⁴⁰ Among the report's recommendations to reverse this decline were better fishing practices and the bolstering of an observer program on longline vessels to 100% by 2025.

In August 2023, the TU-SFP partnership released its first-year report.⁴¹ This includes the completion and publication of a 'bycatch audit' of longline vessels that TU sources its tuna from.⁴² For the Pacific region, the audit included three fisheries: Mahi mahi longline fisheries in the Eastern Pacific and WCPO, and the swordfish longline fishery in the Southeast Pacific Ocean. The audit found that the FIPs from which TU sources tuna from are following the recommendations made by SFP; and going forward, the partnership will work 'to close remaining gaps with the FIPs, understand more of the fisheries TU sources from, and understand whether and how the implementation can be verified.'⁴³ However, the audit does not include the Thai Union WCPO tuna purse seine FIP, which covers vessels that target skipjack and yellowfin tuna, catching an estimated 850,000 mt annually.

SeaChange 2030 brings many of these existing partnerships together to layout a more expanded sustainability strategy aimed at addressing the company's environmental, social, and economic impacts. A majority of the funds that have been allocated to the initiative will be spent on three commitments.⁴⁴ The first is on climate change and as a processor, the company is committing to not only address emissions that it directly creates, but also that are embedded upstream and downstream in its supply chain. TU aims to reduce emissions by 42% by 2030 and to achieve net zero emissions by 2050.⁴⁵ The second is on responsible sourcing of seafood where the work that has been done by the company on tuna sourcing will be replicated for all wild-caught seafood. Currently 81% of the seafood that the company sources is either certified by the MSC, in assessment, or covered under a FIP. The third is the responsible sourcing of farmed seafood across TU's shrimp supply chain, including working with shrimp farmers to improve farming practices and labour conditions.

FAD recovery programs to mitigate risk of coastal habitat damage

To mitigate the risk of marine pollution and damage to coastal habitats from lost and abandoned drifting fish aggregation devices (dFADs), RFMOs, scientists, industry and NGOs are developing initiatives centred on the use of biodegradable materials in FAD construction. However, as reported in *FFA Trade & Industry News* in March-April 2023, there is still much work to be done on developing feasible designs and identifying industrial-scale sources of proven biodegradable materials. Hence, realistically, it could take at least five years before the global purse seine tuna fleet would be able to meet mandatory biodegradable FAD (bioFAD) requirements. Until such time as 100% bioFADs are widely deployed, FAD recovery programs will be critical.

Thai Union invests USD 200 million to reduce GHG emissions and improve responsible seafood sourcing



The tuna fishing industry is proactively engaging in a number of FAD recovery initiatives. This may largely be driven by conditions laid in MSC purse seine FAD fishery certifications which require the impact of lost and abandoned drifting FADs on vulnerable marine ecosystems (VMEs) to be quantified and minimized. In addition, from 1 January 2023, the International Seafood Sustainability Foundation (ISSF) required that purse seine vessels be involved in biodegradable FAD design trials and/or FAD recovery programs.

In the Western and Central Pacific Ocean (WCPO), The Nature Conservancy has partnered with commercial purse seine tuna vessel operators and satellite buoy companies to remove debris from lost drifting FADs from reefs, lagoon and beaches within the Pacific Remote Marine National Monument (PRIMNM) around Palmyra Atoll. This partnership began in June 2021 with US purse seine vessel owners. More recently, in 2023, the Spanish Pacific Asociación de Grandes Atuneros Congeladores (AGAC) purse seine fleet also joined this program. The program presents an opportunity to remove debris from lost FADs, recover satellite buoys for re-purposing and collect scientific data about fish biomass from tracked buoys.⁴⁶

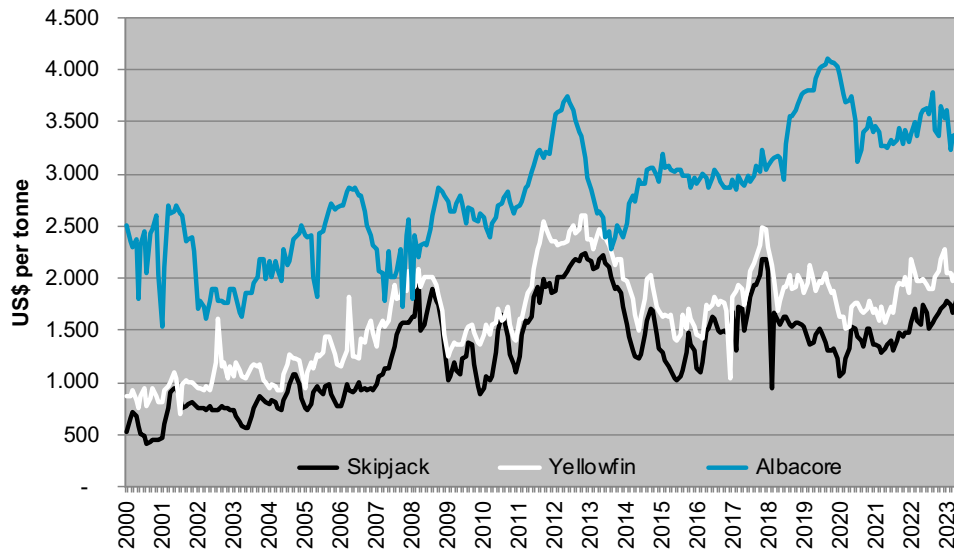
Outside the WCPO, the 'FAD Watch Project' has been established in Seychelles, which is a collaboration between the Seychelles Fishing Authority (SFA), the Sustainable Indian Ocean Tuna Initiative (SIOTI) and the Spanish Association of Tuna Freezers (AGAC) and includes all EU purse seiners operating in the Indian Ocean. Through the provision of dFAD satellite tracking data by vessel owners, SFA identifies FADs drifting towards eighteen islands with online software. A Seychelles Coastguard vessel is used to intercept and retrieve the FADs before they can beach and cause harm to marine ecosystems. The recovered FADs are delivered to Mahe in Seychelles where they can be disposed of, re-used or recycled. This project builds on previous FAD recovery efforts by AGAC and local partners which commenced in 2016.⁴⁷

In December 2022, Spanish technology company Satlink launched 'Project ReCon', a circular economy program designed to give a second life to echosounder buoys recovered from lost drifting FADs. Satlink is working with its network of fishing companies in the Pacific and Indian oceans, as well as local partners (including the Pacific Community), to collect the buoys and refurbish them for re-use in projects focussed on science and sustainability.⁴⁸

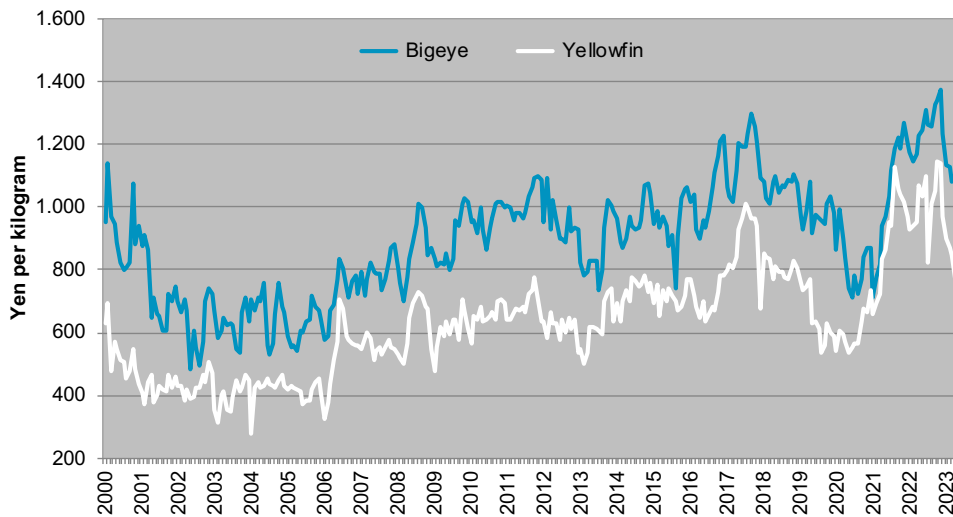
*Until 100%
bioFADs
are widely
deployed,
FAD recovery
programs will
be critical*

TUNA PRICE TRENDS⁴⁹

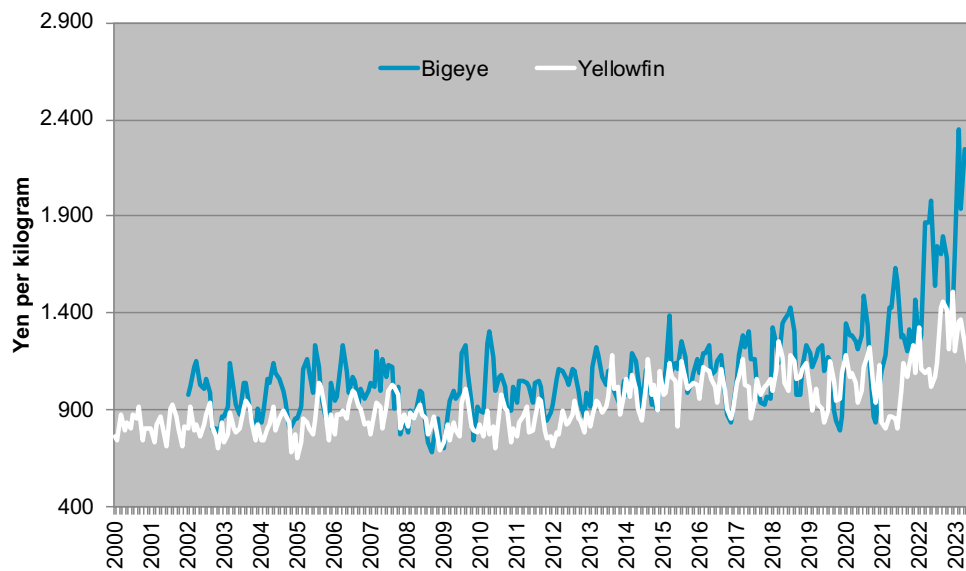
Bangkok canning-grade prices to June 2023⁵⁰



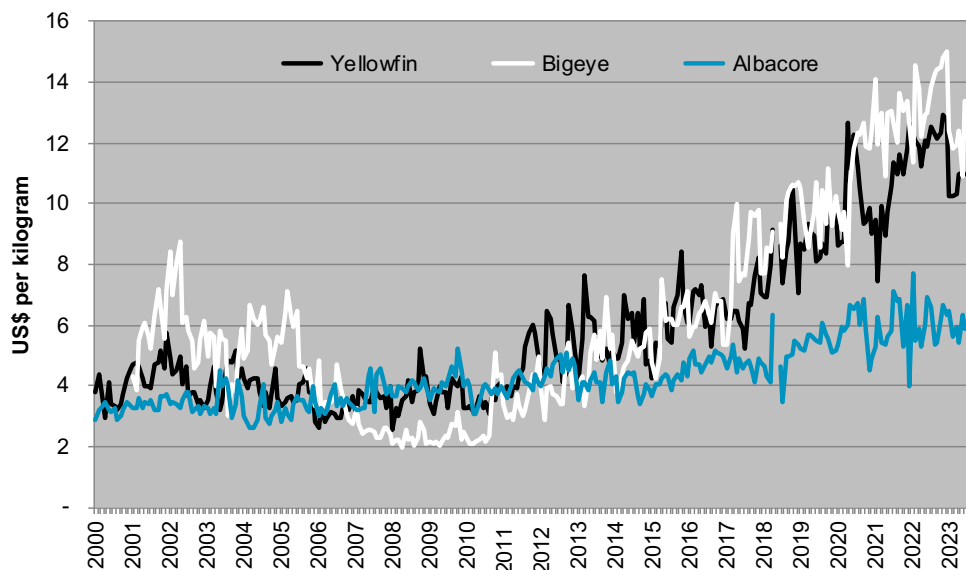
Japan frozen sashimi prices (ex-vessel, Japanese ports) to June 2023⁵¹



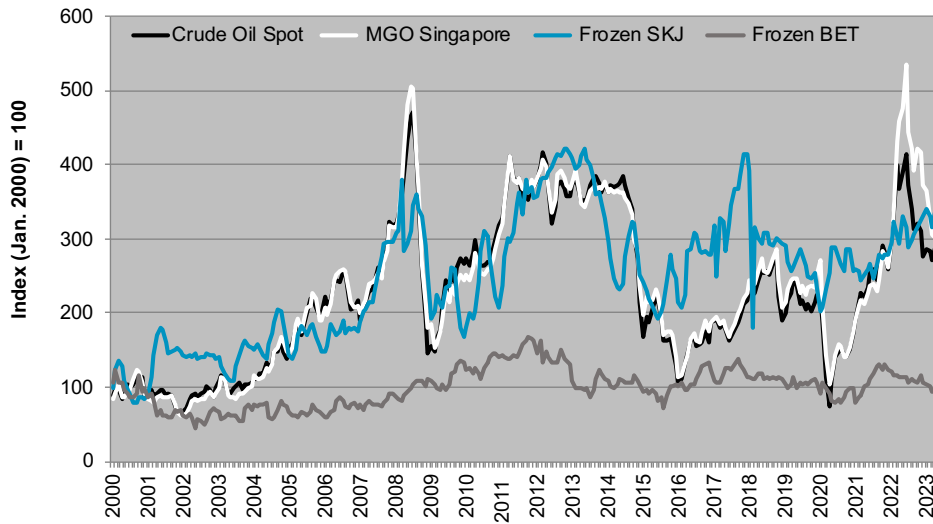
Japan fresh sashimi prices (origin Oceania) to June 2023⁵²



US imported fresh sashimi prices to June 2023⁵³



Crude oil, canning-grade frozen skipjack (SKJ) and frozen bigeye (BET) price index to June 2023⁵⁴



¹ Prepared for the FFA Fisheries Development Division by Dr Elizabeth Havice, University of North Carolina at Chapel Hill, Professor Liam Campling, School of Business and Management, Queen Mary University of London, and Mike McCoy, independent consultant, all Consultant Fisheries Trade and Market Intelligence Analysts, Fisheries Development Division, FFA. Desktop publishing by Antony Price. The authors would like to thank FFA for their input on an earlier draft of this briefing. The contents of this briefing (including all analysis and opinions) are the responsibility of the authors and do not necessarily reflect the positions or thinking of the FFA Secretariat or its Members.

² Industry source, September 2023

³ Jason Holland 2023, 'Europeche leaders call for fairness in EU seafood import rules', *Seafood Source*, 2 August.

⁴ The lines of division are most clearly apparent in the Spanish industry – which dominates the EU tuna industry – where specialised fishing firms are members of the ANABAC producer organisation such as Inpesca, Atunsa, Echebaster and Pevasa, and vertically-integrated fishing-processing firms are members of the OPAGAC producer association, such as Albacora, Calvo and Garavilla.

⁵ Jason Holland 2023, 'Europeche leaders call for fairness in EU seafood import rules', *Seafood Source*, 2 August; Matilde Mereghetti 2023, 'Talk EU will extend current ATQs causes division in seafood sector', *Undercurrent News*, 17 July. See also: <http://europeche.chil.me/>

⁶ Dominic Welling 2023, 'AIPCE - Free trade agreements alone aren't enough for EU processing industry', *Intrafish*, 29 June. See also: <https://www.aipce-cep.org/>

⁷ Nathan Strout 2023. 'US bill would even playing field for US tuna fleet in the South Pacific', *Seafood Source*, 28 July.

⁸ *ibid.*

⁹ *Report to Congress: Improving International Fisheries Management*, Washington, DC: Department of Commerce and National Oceanic and Atmospheric Administration. August. Additional reporting from: John Evans 2023. 'NOAA: China, Russia among those continuing to fail on IUU fishing', *Intrafish News*, 1 September.

¹⁰ Liam Campling, Elizabeth Havice and Mike McCoy 2022. 'US proposes a rule to add forced labour to IUU definition', *FFA Trade and Industry News*, 15(5): September-October.

¹¹ Nathan Strout 2023. 'NOAA report accuses seven nations, including China and Taiwan, of supporting illegal fishing', *Seafood Source*, 4 September.

¹² Brian Hagenbuch 2021. 'Scientists call for moratorium on ocean mining, fearing impact on Pacific tuna fishery', *Seafood Source*, 9 September.

¹³ Nathan Strout 2023. 'US lawmakers call for a moratorium on deep-seabed mining', *Seafood Source*, 17 July.

¹⁴ Karen McVeigh 2023. 'Seafood industry joins a chorus of groups calling for halt to deep-sea mining plans', *The Guardian*, 11 July.

¹⁵ Diva J. Amon, Juliano Palacios-Abrantes, Jeffrey C. Drazen, Hannah Lily, Neil Nathan, Jesse M.A. van der Grient and Douglas McCauley 2023. 'Climate change to drive increasing overlap between Pacific tuna fisheries and emerging deep sea mining industry', *npj Ocean Sustainability*, 2(9): 1-8.

¹⁶ Karen McVeigh 2023. 'International talks end without go-ahead for deep-sea mining', *The Guardian*, 29 July; Elizabeth Claire Alberts. 'Deep-sea mining meetings conclude after stalemate on key agenda items', *Mongabay*, 31 July.

¹⁷ Molyneux, P. 2023, 'Eye in the sky', *National Fisherman*, 27 July; quoted in 'Australia, Pacific Islands sign IUU monitoring deal with HawkEye 360', *Seafood Source*, 28 July.

¹⁸ Erwin, S. 2022, 'NRO signs agreements with six commercial providers of space-based RF data', *Space News*, 28 September.

¹⁹ 'Keeping tabs on China's murky maritime manoeuvres', *The Economist*, 15 August 2023

²⁰ Pacific Fusion Centre Website 2023: <https://www.pacificfusioncentre.org>

²¹ IATTC – Resolution C-23-07 on the Design and Biodegradability of Drifting FAD Fish Aggregating Devices (DFADs) in the IATTC Area of Competence

- ²² IATTC – Resolution C-23-03: Amendment to Resolution C-99-77 on Fish Aggregating Devices
- ²³ IATTC - Resolution C-23-10 on climate change
- ²⁴ IATTC - Resolution C-23-07: Conservation measures for the protection and Sustainable management of sharks
- ²⁵ IATTC – Resolution C-23-02: Amendment to Harvest Strategy for North Pacific Albacore in the Eastern Pacific Ocean
- ²⁶ IATTC – Resolution C-23-06: Amendment to Resolution C-16-02 on harvest control rules for tropical tunas (yellowfin, bigeye and skipjack)
- ²⁷ WCPFC (CMM 2022-04); IATTC (Resolution C-23-07), ICCAT (Recommendation 04-10) & IOTC (Resolution 17/05); refer to RFMO websites.
- ²⁸ ISSF Conservation Measure 3.1 – Sharks; available at: <https://www.iss-foundation.org>
- ²⁹ MSC website: <https://www.msc.org> – Shark finning: identifying further solutions, accessed 21 September 2023.
- ³⁰ Stop Finning EU – European Citizens’ Initiatives website: <https://stop-finning-eu.org/european-citizens-initiative/>; accessed 21 September 2023. Since 2012, EU citizens have been afforded the right to apply to the European Commission with a European Citizen’s Initiative proposing legislative amendment on particular issues of concern. To do so, a Citizen’s Committee must be established comprised of a minimum of seven members from seven member states; the Citizen’s Committee must then collect at least one million signatures in at least a quarter of EU states (currently seven) with one year. The EC has a legal obligation to reply within six months after the submission of a European citizen’s initiative. The proposal may be adopted and corresponding amendments made to legislation; the EC may also reject the citizens’ initiative and is required to state their reasons for doing so.
- ³¹ *ibid.*
- ³² European Commission 2023, ‘Questions and Answers on ‘Stop finning – Stop the Trade’ European citizens’ initiative, 5 July.
- ³³ Stop Finning EU 2023
- ³⁴ EC 2023
- ³⁵ Authored with Siddharth Chakravarty
- ³⁶ ‘Thai Union launches Seachange 2030’, Thai Union, Press Release, 18 July 2023.
- ³⁷ McBain, Darian 2021, ‘SeaChange- Five years of focus’, *Thai Union*.
- ³⁸ ‘Thai Union and The Nature Conservancy release first Partnership Progress Report on full tuna supply chain transparency’, Thai Union, Press Release, 12 January 2023.
- ³⁹ ‘Thai Union and Sustainable Fisheries Partnership record successes in first year of partnership’, Thai Union, Press Release, 22 August 2023.
- ⁴⁰ Sustainable Fisheries Partnership 2022, *Reversing the decline of sharks, sea turtles, and seabirds in the Western Central Pacific Ocean: An opportunity for major tuna buyers*, Sustainable Fisheries Partnership, December.
- ⁴¹ Thai Union and Sustainable Fisheries Partnership 2023, *Partnership Progress Review: Year-1 public report*, Sustainable Fisheries Partnership, August.
- ⁴² Key Traceability, 2023. *Thai Union overview analysis report of sustainable fisheries partnership’s ETP bycatch audit*, Key Traceability, April.
- ⁴³ Thai Union and Sustainable Fisheries Partnership 2023, *Partnership Progress Review: Year-1 public report*, Sustainable Fisheries Partnership, August.
- ⁴⁴ Galler, Grace 2023, ‘Sustainability costs money: Diving into SeaChange 2030’, *New Food Magazine*, 8 August.
- ⁴⁵ Southey, Flora 2023, ‘How Thai Union plans to achieve net zero emissions by 2050’, *Food Navigator Europe*, 21 July.

⁴⁶ 'TNC Announces Expansion of Partnership to Drive Conservation and Pacific Island Food Security, *The Nature Conservancy*, 2 May 2023.

⁴⁷ Betymie Bonnelame 2023, 'Seychelles Fishing Authority signs up for project designed to intercept drifting FADs', Seychelles News Agency, 1 August.

⁴⁸ 'Satlink launches its project ReCon: circular economy to give devices for sustainable fishing a second life', *Satlink*, 14 December 2022.

⁴⁹ All databases are provided by the Fisheries Development Division at FFA.

⁵⁰ Customs Department, Thailand. http://www.customs.go.th/statistic_report.php?lang=en&show_search=1

⁵¹ FFA database

⁵² Japan Customs. https://www.customs.go.jp/toukei/info/index_e.htm

⁵³ US National Marine Fisheries Service. <https://foss.nmfs.noaa.gov/apexfoss/f?p=215:2:10663896522198::NO>

⁵⁴ Y Charts: https://ycharts.com/indicators/average_crude_oil_spot_price; Ship & Bunker: <https://shipandbunker.com/prices/apac/sea/sg-sin-singapore#MGO>